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| EXAMINER | |
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| DWIVEDI, MAHESH H | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2168 | |

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/630,339 | BONE ET AL. | |
| | Examiner | Art Unit | |
| | Mahesh H. Dwivedi | 2168 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *21 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *37-105* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-105* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/12/2004*. 10/30/2003
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Remarks*

1. Election was made with traverse of Group III, (claims 37-105) is acknowledged. Group I (claims 1-16), Group II (claims 17-36), and Group IV (claims 106-113), are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected.

### *Information Disclosure Statement*

2. The information disclosure statements (IDS) submitted on 10/12/2004 and 10/30/2003 have been received, entered into the record, and considered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

The examiner notes that reference C15 from the information disclosure statement submitted on 10/20/2003 is not being considered since there is no date provided with it.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 43 recites the limitation "the second filesystem request" in page 100. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 37-43, 52-59, 69-76, 86-93, and 103-105 are rejected under 35 U.S.C. 102(e) as being anticipated by **Heilig et al.** (U.S. PGPUB 2002/0046262).

7. Regarding claim 37, **Heilig** teaches a system comprising:

A) a network (Paragraph 50);

B) a plurality of client computers (Paragraph 58);

C) each client computer comprising: a client processor (Paragraph 58);

D) a client network interface to connect to and interface with the network (Paragraphs 50 and 58);

E) a client computer readable medium accessible by the client processor, storing a client program executable by the client processor to: generate a first filesystem request (Paragraph 103);

F) receive a first filesystem response (Paragraph 116);

G) an intermediary device comprising: an intermediary processor (Paragraph 116);

H) an intermediary network interface to connect to and interface with the network (Paragraph 116);

I) an intermediary computer readable medium accessible by the intermediary processor and executable to: provide a client-facing filesystem interface (Paragraph 102);

J) provide a server-facing filesystem interface (Paragraphs 117-118 and 122);

K) receive the first filesystem request from a requesting client according to the client-facing filesystem interface (Paragraph 103);

L) pass the first filesystem request to a server as a proxy request according to the server-facing filesystem interface (Paragraph 107);

M) receive a server response from the server according to the server facing interface (Paragraphs 120 and 124);

N) pass the server response to the requesting client as the first filesystem response (Paragraph 124);

O) a plurality of servers (Paragraph 31);

P) each server further comprising: a server processor (Paragraph 31);

Q) a server interface coupled to the server processor to connect to and interface with the network (Paragraphs 117-118 and 122);

R) a server computer readable medium storing a server program executable by the server processor to: provide an origin filesystem (Paragraph 31);

S) receive the proxy request from the intermediary device (Paragraph 120);

T) execute a requested operation (Paragraph 120);

U) generate the server response (Paragraphs 120 and 124); and

V) communicate the server response to the intermediary computer (Paragraph 124).

Regarding claims 38, 58, 75, and 92, **Heilig** further teaches a system, an intermediary device, device, and method comprising:

A) modifying the filesystem request to generate the proxy request (Paragraphs 61 and 67).

The examiner notes that **Heilig** teaches **"modifying the filesystem request to generate the proxy request"** as "the proxy server may utilize information included in the client data request to determine whether a rendering, i.e. further processing or rewriting of the data is necessary before transmission to the client" (Paragraph 61).

Regarding claim 39, **Heilig** further teaches a system comprising:

A) wherein the intermediary program is executable to apply active rules to the first filesystem request (Paragraphs 149-150).

The examiner notes that **Heilig** teaches **"wherein the intermediary program is executable to apply active rules to the first filesystem request"** as "in the event that the client generates a data request concerning a document exceeding a predetermined size, the user may set a preference to render the data" (Paragraph 150).

Regarding claims 40, 59, 76, and 93, **Heilig** further teaches a system, an intermediary device, device, and method comprising:

A) modifying the server response to generate the proxy response (Paragraphs 61 and 67).

The examiner notes that **Heilig** teaches **"modifying the server response to generate the proxy response"** as "the proxy server may utilize information included in the client data request to determine whether a rendering, i.e. further processing or rewriting of the data is necessary before transmission to the client" (Paragraph 61).

Regarding claims 41, 56, 73, and 90, **Heilig** further teaches a system, an intermediary device, device, and method comprising:

A) determining whether to further process the filesystem request (Paragraph 115);

B) generating a redirect reply (Paragraphs 133-135); and

C) communicating the redirect reply to the requesting client (Paragraphs 133-135).

The examiner notes that **Heilig** teaches **"determining whether to further process the filesystem request"** as "In case the determining module 422 concludes that the request received from the client 102*i* does not require any rendering operations...the proxy server 420 may directly transmit the requested data to the client device" (Paragraph 115). The examiner further notes that **Heilig** teaches **"generating a redirect reply"** as "The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133). The examiner further notes that **Heilig** teaches **"communicating the redirect reply to the requesting client"** as "The proxy server 420 then generates a dummy response or link

message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133).

Regarding claim 42, **Heilig** further teaches a system comprising:

A) wherein the client program at each client is further executable to: receive the redirect response as the first filesystem response (Paragraphs 133-135);

B) generate a second filesystem request (Paragraphs 133-135); and

C) communicate the second filesystem request to the origin server (Paragraphs 133-135).

The examiner notes that **Heilig** teaches **"wherein the client program at each client is further executable to: receive the redirect response as the first filesystem response"** as "The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133). The examiner further notes that **Heilig** teaches **"generate a second filesystem request"** as ""The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133). The examiner further notes that **Heilig** teaches **"communicate the second filesystem request to the origin server"** as "The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133).

Regarding claim 43, **Heilig** further teaches a system comprising:

A) wherein the server program at the origin server is further executable to: receive the second filesystem request (Paragraphs 133-135);

B) execute a requested operation (Paragraphs 133-135);

C) generate a second server response (Paragraphs 133-135); and

D) pass the second server response to the requesting client (Paragraphs 133-135).

The examiner notes that **Heilig** teaches **"wherein the server program at the origin server is further executable to: receive the second filesystem request"** as "The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133). The examiner further notes that **Heilig** teaches **"execute a requested operation"** as ""The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133). The examiner further notes that **Heilig** teaches **"generate a second server response"** as "The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133). The examiner further notes that **Heilig** teaches **"pass the second server response to the requesting client"** as "The proxy server 420 then generates a dummy response or link message 521, e.g., in data

retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133).

Regarding claims 52, 69, 86, and 103, **Heilig** further teaches a system, an intermediary device, device, and method comprising:

A) comparing the filesystem request to a programmable rulebase to determine if the filesystem request matches a pattern (Paragraphs 149-150); and

B) if the filesystem request matches a pattern, executing an action associated with the pattern (Paragraphs 149-150).

The examiner notes that **Heilig** teaches **"comparing the filesystem request to a programmable rulebase to determine if the filesystem request matches a pattern"** as "in the event that the client generates a data request concerning a document exceeding a predetermined size, the user may set a preference to render the data" (Paragraph 150). The examiner further notes that **Heilig** teaches **"if the filesystem request matches a pattern, executing an action associated with the pattern"** as "in the event that the client generates a data request concerning a document exceeding a predetermined size, the user may set a preference to render the data" (Paragraph 150).

Regarding claims 53, 70, 87, and 105, **Heilig** further teaches a system, an intermediary device, device, and method comprising:

A) executing the action out-of-band (Paragraph 156).

The examiner notes that **Heilig** teaches **"executing the action out-of-band"** as "The proxy server may still retrieve at least some of the requested data, for example a part of the requested data including data type information, until a decision on rendering is possible and then stop retrieving the requested data" (Paragraph 156).

Regarding claims 54, 71, 88, and 105, **Heilig** further teaches a system, an intermediary device, device, and method comprising:

A) executing the action in-band (Paragraphs 149-150).

The examiner notes that **Heilig** teaches **"executing the action in-band"** as "in the event that the client generates a data request concerning a document exceeding a predetermined size, the user may set a preference to render the data" (Paragraph 150).

Regarding claim 55, **Heilig** teaches an intermediary device comprising:

A) a processor (Paragraph 116);

B) a network interface to connect to and interface with a network (Paragraph 50);

C) a computer readable medium accessible by the processor and executable to:

provide a client-facing filesystem interface (Paragraph 102);

D) provide a server-facing filesystem interface (Paragraphs 117-118, and 122);

E) receive a filesystem request from a requesting client according to the client-facing filesystem interface (Paragraph 103);

F) pass the filesystem request to a server as a proxy request according to the server-facing filesystem interface (Paragraph 107);

G) receive a server response from the server according to the server-facing interface (Paragraphs 120 and 124); and

H) pass the server response to the requesting client as a proxy response (Paragraph 124).

The examiner notes that **Heilig** teaches **"a computer readable medium accessible by the processor and executable to: provide a client-facing filesystem interface"** as "The client 102*i* may be connected to the wide area network 401 via I/O interface 408" (Paragraph 102). The examiner further notes that **Heilig** teaches **"providing a server-facing filesystem interface"** as "Communication between the client 102*i* and the processing server 410 may include a bitmap protocol or X Windows protocol" (Paragraph 122). The examiner further notes that **Heilig** teaches **"receive a filesystem request from a requesting client according to the client-facing filesystem interface"** as "The client 102*i* preferably sends requests to the proxy server 420" (Paragraph 103). The examiner further notes that **Heilig** teaches "pass the filesystem request to a server as a proxy request according to the server-facing filesystem interface" as "Preferably this involves sending a request from the proxy server 420 to the data server 440" (Paragraph 102). The examiner further notes that **Heilig** teaches **"receive a server response from the server according to the server-facing interface"** as "It is noted that processing server 410 may also be arranged to transmit the rendered data to the client on a return path including the proxy server" (Paragraph 124). The examiner further notes that **Heilig** teaches **"pass the server response to the requesting client as a proxy response"** as "It is noted that

processing server 410 may also be arranged to transmit the rendered data to the client on a return path including the proxy server" (Paragraph 124).

Regarding claims 57, 74, and 91, **Heilig** further teaches an intermediary device, device, and method comprising:

A) wherein the redirect reply is configured to prompt the requesting client to generate a second filesystem request to the server (Paragraphs 133-135).

The examiner notes that **Heilig** teaches **"wherein the redirect reply is configured to prompt the requesting client to generate a second filesystem request to the server"** as "The proxy server 420 then generates a dummy response or link message 521, e.g., in data retrieval module 421, wherein the link message instructs the client to redirect the data request to the processing server 410" (Paragraph 133).

Regarding claims 72, and 89, **Heilig** teaches a device, and method comprising:

A) providing a client-facing filesystem interface (Paragraph 102);

B) providing a server-facing filesystem interface (Paragraphs 117-118, and 122);

C) receiving a filesystem request from a requesting client according to the client-facing filesystem interface (Paragraph 103);

D) passing the filesystem request to a server as a proxy request according to the server-facing filesystem interface (Paragraph 107);

E) receiving a server response from the server according to the server-facing interface (Paragraphs 120 and 124); and

F) passing the server response to the requesting client as a proxy response (Paragraph 124).

The examiner notes that **Heilig** teaches **"providing a client-facing filesystem interface"** as "The client 102*i* may be connected to the wide area network 401 via I/O interface 408" (Paragraph 102). The examiner further notes that **Heilig** teaches **"providing a server-facing filesystem interface"** as "Communication between the client 102*i* and the processing server 410 may include a bitmap protocol or X Windows protocol" (Paragraph 122). The examiner further notes that **Heilig** teaches **"receiving a filesystem request from a requesting client according to the client-facing filesystem interface"** as "The client 102*i* preferably sends requests to the proxy server 420" (Paragraph 103). The examiner further notes that **Heilig** teaches **"passing the filesystem request to a server as a proxy request according to the server-facing filesystem interface"** as "Preferably this involves sending a request from the proxy server 420 to the data server 440" (Paragraph 102). The examiner further notes that **Heilig** teaches **"receiving a server response from the server according to the server-facing interface"** as "It is noted that processing server 410 may also be arranged to transmit the rendered data to the client on a return path including the proxy server" (Paragraph 124). The examiner further notes that **Heilig** teaches **"passing the server response to the requesting client as a proxy response"** as "It is noted that processing server 410 may also be arranged to transmit the rendered data to the client on a return path including the proxy server" (Paragraph 124).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 44-51, 60-68, 77-85, and 94-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Heilig et al.** (U.S. PGPUB 2002/0046262) as applied to claims 37-43, 52-59, 69-76, 86-93, and 103-105 and further in view of **Kao** (U.S. Patent 5,870,734).

10. Regarding claims 60, 77, and 94, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) presenting a union filesystem via the client-facing interface.

**Kao**, however, teaches **"presenting a union filesystem via the client-facing interface"** as "A file system uses a virtual node architecture to create a three-dimensional directory" (Abstract) and "file systems are manipulated through an object called a "vfs", or virtual file system" (Column 3, lines 17-18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

Regarding claims 44, 61, 78, and 95, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) defining an import space comprising one or more of the origin filesystems;

B) defining an export space comprising one or more union filesystems; and

C) wherein the one or more union filesystems are based on the one or more origin filesystems in the import space.

**Kao**, however, teaches **"defining an import space comprising one or more of the origin filesystems"** as "The virtual node architecture allows the present system to accommodate diverse file systems by permitting each node to designate an individual physical file storage system" (Column 5, lines 8-11) and "Any directory or file in the present file system is represented by a vnode, in accordance with the virtual node architecture" (Column 6, lines 29-31), **"defining an export space comprising one or more union filesystems"** as "The virtual node architecture allows the present system

to accommodate diverse file systems by permitting each node to designate an individual physical file storage system" (Column 5, lines 8-11) and "Any directory or file in the present file system is represented by a vnode, in accordance with the virtual node architecture" (Column 6, lines 29-31), and **"wherein the one or more union filesystems are based on the one or more origin filesystems in the import space"** as "The virtual node architecture allows the present system to accommodate diverse file systems by permitting each node to designate an individual physical file storage system" (Column 5, lines 8-11) and "Any directory or file in the present file system is represented by a vnode, in accordance with the virtual node architecture" (Column 6, lines 29-31).

The examiner notes that by having a virtual node architecture representation (see "vnodes"), **Kao's** method must have an origin filesystem (see "individual physical file storage system") which is virtually represented as those vnodes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

Regarding claims 45, 62, 79, and 96, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) wherein further comprising stack organizing the one or more origin filesystems in the import space into a stack.

**Kao**, however, teaches **"wherein further comprising stack organizing the one or more origin filesystems in the import space into a stack"** as "The Z-stack is constructed by linking (Z-links) the vnodes representing a pre-selected set of directories" (Column 6, lines 29-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

Regarding claims 46, 63, 80, and 97, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) stack organizing the one or more origin filesystems by subsuming files and directories from lower origin filesystems in the stack into similarly named files and directories from higher origin filesystems in the stack.

**Kao**, however, teaches **"stack organizing the one or more origin filesystems by subsuming files and directories from lower origin filesystems in the stack into similarly named files and directories from higher origin filesystems in the stack"** as "The "Z-Beam_up" operations copies files in a specified directory at a lower level in the Z-stack to a specified directory at a higher level in the Z-stack" (Column 7, lines 20-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching

**Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

Regarding claims 47, 64, 81, and 98, **Heilig** further teaches a system, an intermediary device, device, and method comprising:

A) wherein the filesystem request further comprises the requested operation and a file upon which the requested operation is to occur (Paragraph 58).

The examiner notes that **Heilig** teaches **"wherein the filesystem request further comprises the requested operation and a file upon which the requested operation is to occur"** as "a request from a user device 102*i*, where user device102*i* can be any one of the plurality of user devices 102A to 102F, specifies (i) a suitable address to the location where the content associated with the request is stored, for example, an address in the form of a uniform resource locator (URL)...the types of data that can be processed and displayed to the user device" (Paragraph 58).

Regarding claims 48, 65, 82, and 99, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) passing the proxy request based on the filesystem request to a topmost origin filesystem in the stack that contains the file upon which the requested operation is to occur.

**Kao**, however, teaches **"passing the proxy request based on the filesystem request to a topmost origin filesystem in the stack that contains the file upon**

**which the requested operation is to occur"** as "If the path names traverses a Z-stack, the lookup procedure starts at the top directory vnode in the stack to search for the desired entry" (Column 6, lines 46-49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

Regarding claims 49, 66, 83, and 100, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) passing the proxy request to a topmost origin filesystem in the stack that contains an innermost directory associated with the file upon which the requested operation is to occur.

**Kao**, however, teaches **"passing the proxy request to a topmost origin filesystem in the stack that contains an innermost directory associated with the file upon which the requested operation is to occur"** as "IF the user changes to the parent directory of dir_cp, the current directory is moved to the directory at the top of the Z-stack" (Column 6, lines 62-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

Regarding claims 50, 67, 84, and 101, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) flagging a particular file in an upper origin filesystem in the stack to prevent particular other files in one or more lower origin filesystems in the stack from becoming visible.

**Kao**, however, teaches **"flagging a particular file in an upper origin filesystem in the stack to prevent particular other files in one or more lower origin filesystems in the stack from becoming visible"** as "the original paths are blocked between lower level vnodes in the stack and their original parent directories" (Column 7, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

Regarding claims 51, 68, 85, and 102, **Heilig** does not explicitly teach a system, an intermediary device, device, and method comprising:

A) wherein the particular file and particular other files share a common name.

**Kao**, however, teaches **"wherein the particular file and particular other files share a common name"** as "FIG. 2" (Figure 2).

The examiner notes that Figure 2 of **Kao** teaches multiple directories having files with common names (see "awk" and "liby.a")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Kao's** would have allowed **Heilig's** to provide a method for recognition of all mounted file systems for clients, as noted by **Kao** (Column 4, lines 18-22).

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,122,629 issued to **Walker et al.** on 19 September 2000. The subject matter disclosed therein is pertinent to that of claims 37-105 (e.g., methods to optimize and process client requests).

U.S. Patent 6,463,465 issued to **Nieuwejaar** on 08 October 2002. The subject matter disclosed therein is pertinent to that of claims 37-105 (e.g., methods to optimize and process client requests).

U.S. Patent 6,085,234 issued to **Pitts et al.** on 04 July 2000. The subject matter disclosed therein is pertinent to that of claims 37-105 (e.g., methods to optimize and process client requests).

U.S. Patent 6,247,139 issued to **Walker et al.** on 12 June 2001. The subject matter disclosed therein is pertinent to that of claims 37-105 (e.g., methods to optimize and process client requests).

U.S. Patent 6,161,191 issued to **Slaughter et al.** on 12 December 2000. The subject matter disclosed therein is pertinent to that of claims 37-105 (e.g., methods to optimize and process client requests).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi

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December 06, 2006

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